RAW SEQUENCE LISTING

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Application Serial Number:	10/573, 262
Source:	IFWO
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RAW SEQUENCE LISTING DATE: 02/23/2007
PATENT APPLICATION: US/10/573,262 TIME: 11:59:27

Input Set : A:\2007-02-19 4600-0119PUS1.ST25.txt

Output Set: N:\CRF4\02232007\J573262.raw

```
3 <110> APPLICANT: KAZUSA DNA RESEARCH INSTITUTE FOUNDATION; Institute for Biomedical
             Research and Innovation
             Hisashi Koqa et al.
     7 <120> TITLE OF INVENTION: NOVEL PLEXIN POLYPEPTIDE, DNA ENCODING THE SAME AND USE
THEREOF
     9 <130> FILE REFERENCE: 4600-0119PUS1
    11 <140> CURRENT APPLICATION NUMBER: US 10/573,262
    12 <141> CURRENT FILING DATE: 2006-03-23
    14 <150> PRIOR APPLICATION NUMBER: JP 2003-371040
    15 <151> PRIOR FILING DATE: 2003-10-30
    17 <150> PRIOR APPLICATION NUMBER: JP 2004-229871
    18 <151> PRIOR FILING DATE: 2004-08-05
    20 <160> NUMBER OF SEQ ID NOS: 24
    22 <170> SOFTWARE: PatentIn version 3.1
    24 <210> SEQ ID NO: 1
    25 <211> LENGTH: 1746
    26 <212> TYPE: PRT
    27 <213> ORGANISM: mouse
    29 <400> SEQUENCE: 1
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    47 Ser Leu Asp Ala Arg Gly Asp Leu Ala Lys Leu Phe Thr Phe Asp Leu
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                                           90
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                   100
    59 Pro His Ser Ala Gln Pro Tyr Ala Tyr Leu Ala Leu Asn Ser Glu Ala
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                                   120
    63 Arg Ala Gly Asp Lys Asp Ser Gln Ala Arg Ser Leu Leu Ala Arg Ile
                               135
    67 Cys Leu Pro Arg Gly Ala Gly Gly Asp Ala Lys Lys Leu Thr Glu Ser
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                                              155
    71 Tyr Ile Gln Leu Gly Leu Gln Cys Ala Gly Gly Ala Gly Arg Gly Asp
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                                           170
    75 Leu Tyr Ser Arg Leu Val Ser Val Phe Pro Ala Arg Glu Gln Phe Phe
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79 Ala Val Phe Glu Arg Pro Gln Gly Ala Pro Gly Ala Arg Asn Ala Pro

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	Δla	Δla		Cvs	Δla	Phe	Ara		Asp	Asp	Val	Gln		Ala	Tle	Arc
84	n L u	210	шси	Cys	AIG	TIIC	215	1110	пор	2101	141	220				***
-	Λ Ι =		Δνα	Thr	2 T Z	Cve		Va l	Glu	Dro	Δla		Δsn	Val	Val	Δ1 :
88 2		AIG	AI 9	1111	ліа	230	FIIC	val	. OI u	110	235	110	1100	1 41	V 4.1	240
		Lou	7 cn	Sor	17-1		Gl n	Gl v	Thr	Glv		Δla	Cvc	Glu	Ser	
91 ' 92	vaı	ьеи	Asp	SEL	245	val	GIII	Gry	1111	250	FIO	AIG	Cys	GIU	255	шу.
	7~~	7 an	т1.	~1 _n		Cln	Dro	C1,,	Gln		λan	Cvc	Glv	בות		ui
	arg	ASII	тте		Leu	GIII	PIO	GIU	265	Беп	ASP	Cys	Gry	270	ALA	пт
96		a1	77.5 -	260	T	ml	T1 - '	T		Dece	T	7	77.		Dwo	170
	Leu	GIII			Leu	THE	тте		Gln	ΡΙΟ	пеп	Arg			PLO	va
100	51.		275			- -	. m1	280		7 7.		. או	285		. 7. ~ -	~ 7
	Pne	-	•	ı Pro	-				a Val	AT	ı va.			Alc	i ASI	1 A
104	_	290		1	1		295			m)		300			. т	
	_		: Ala	ı val	L Phe		_	Thi	Ala	i Thi			l rer	і ьег	т груг	
	305			_		310		_			315			_	_,	3
	Ser	Leu	ı Ası	ı Glı			: Glr	ı Val	. Val			g Arg	y va.	ь ьег		
112					325					330					335	
	Ala	а Туз	: Gl			val	His	His	val		Gli	n Phe	: Asp			: A
116				340					345				_	350		_
119	Pro	Gly	7 Tyı	: Lei	і Туі	: Lei	ı Met		: Ser	: His	s Gli	n Met	: Ala	a Arç	y Val	LL
120			355					360					369			
123	Va]	L Ala	a Ala	а Суз	s Glu	ı Val	L His	S Sei	Thr	Cy:	s Gly	y Asr	Cys	va]	Gl	γA
124		370					375					380				
127	Ala	a Asp) Ala	а Туг	r Cys	s Gly	/ Trp	Cys	Thr	: Lei	ı Glı	ı Thi	: Arg	g Cys	Th	c L
	385					390					39!					4
131	Glr	ı Glr	ı Ası	Cys	s Thi	c Asr	ı Sei	: Sei	Glr	ı Pro	o His	s Phe	e Tr	, Thi	: Sei	r A
132					405					410					415	
135	Sei	: Glu	ı Gly	/ Pro	Sei	r Arg	y Cys	s Pro	Ala	a Met	t Thi	r Val	. Le	ı Pro	Se	r G
136				420	_				425					430		
139	$I1\epsilon$	e Asp	val	L His	s Arg	g Asp	ту1	Th:	Gly	7. Met	t Ile	e Lei	ı Glı	ı Ile	e Ser	r G
140			435	5				44()				449	5		•
143	Sei	: Lei	ı Pro	Sei	r Lei	ı Sei	Gly:	/ Met	: Glu	ı Met	t Ala	a Cys	a Ası	э Туз	Gly	y A
144		450			•		455					460				
147	Gly	/ Val	Arg	y Thi	r Val	l Ala	a Arg	y Val	Pro	Gly	y Pro	o Ala	а Туз	r Ası	His	3 G
148	465	5				470)				475	5				4
151	Ile	, Ala	а Туз	c Cys	s Ası	ı Leı	ı Let	ı Pro	Arg	g Ala	a Gli	n Phe	Pro	Sez	: Phe	e P
152					485	5				49	0				49	5
155	Ala	a Gly	/ Glr	ı Asr	His	s Val	LThi	c Val	l Gli	ı Met	t Se	r Val	Arg	y Val	l Lys	s G
156				500)				505	5				510)	
159	His	s Asr	ı Ile	e Val	l Sei	r Ala	a Ası	n Phe	e Thi	: Ile	e Ty	r Ası	Cys	s Sei	Arg	j I
160			515					520			_	Δ	52			
163	Gly	/ Glr	ı Val	LTy	r Pro	His	Thi	. Ala	а Суя	Th	r Se	r Cys	. Lei	ı Sei	c Thi	r G
164	_	530		_			535		_			540				
167	Tr	Pro	Cys	s Sei	r Tr	с Суя	: Ile	e Gli	ı Leı	ı His	s Se	r Cys	va:	l Sei	. Ası	n G
	545		_		•	550					55!					5
			ı Cys	s Glr	n Ası	Sei	. Pro) Ası	n Pro	Th	r Sei	r Pro	Gli	a Ası	Cys	s P
171			-		565	•				570				_	57	
					50:	,				J , ,	•			_		
172	Glr	ı Ile	e Lei	ı Pro		_	Lei	ı Ala	a Pro			o Thi	Gly	y Gly		

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	Leu	Glu 610	Cys	Ser	Phe	Gly	Leu 615	Glu	Glu	Ser	Phe	Glu 620	Ala	Val	Trp	Ala
187	Asn		Ser	Leu	Val	Arg 630		Asn	Gln	Val	Val 635	Leu	His	Thr	Thr	Gln 640
	625 Lys	Car	Gln	Val	Dhe		T.e.ii	Sar	T.e.ii	Larg		Lvs	Glv	Pro	Pro	
192	_				645					650					655	
195 196	Arg	Phe	Leu	Asp 660	Ser	Pro	Asn	Pro	Met 665	Thr	Val	vaı	vaı	1yr 670	Asn	Cys
199 200	Ala	Met	Gly 675	Ser	Pro	Asp	Cys	Ser 680	Gln	Cys	Leu	Gly	Arg 685	Glu	Asp	Leu
	Gly	His	Leu	Cys	Val	Trp	Asn	Asp	Gly	Cys	Arg	Leu	Arg	Gly	Pro	Leu
204		690					695					700				
	Gln 705	Pro	Leu	Pro	Gly	Thr 710	Cys	Pro	Ala	Pro	Glu 715	Ile	Arg	Ala	Ile	Glu 720
	Pro	Leu	Ser	Glv	Pro		Asp	Gly	Gly	Thr		Leu	Thr	Ile	Arg	Gly
212				•	725		_	-	-	730					735	=
215	Arg	Asn	Leu	Gly	Arg	Arg	Leu	Ser	Asp	Val	Ala	His	Gly	Val	Trp	Ile
216				740					745					750		
219 220	Gly	Ser	Val 755	Ala	Cys	Glu	Pro	Leu 760	Ala	Asp	Arg	Tyr	Thr 765	Val	Ser	Glu
	Glu	Ile	Val	Cys	Ala	Thr	Gly	Pro	Ala	Ala	Gly	Ala	Phe	Ser	Asp	Val
224		770		_			775					780				
227	Val	Thr	Val	Asn	Val	Ser	Lys	Glu	Gly	Arg		Arg	Glu	Gln	Phe	
	785					790					795	_			_	800
	Tyr	Val	Leu	Pro		Val	His	Ser	Leu		Pro	Ser	Met	GLY		Lys
232	Ala	a1	~1	mh	805	Tla		Tlo	uic	810	C0~	7 an	T OU	Λcn	815	Glv
235	Ата	GIA	GIY	820	Arg	TIE	TIII	116	825	GIY	Ser	Asp	пец	830	vai	GIY
	Ser	Met	T.e.11		Val	Leu	Val	Asn	-	Thr	Asp	Pro	Cvs		Asp	Leu
240	001		835				. •	840					845			
	Thr	Arg	Thr	Ala	Thr	Ser	Ile	Thr	Cys	Thr	Val	Pro	Gly	Gly	Thr	Leu
244		850					855					860			•	
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	865					870					875		_			880
	His	Gly	Asn	Leu		Phe	Trp	Tyr	Met		Asn	Pro	Val	Ile		Ala
252	T 1.		Desc	~1	885	C 0 22	Deco	1707	Cox	890	C1	7 ~~~	Thr	Tlo	895	บอไ
	Ile	ser	PIO	900	Arg	ser	PIO	vai	905	GIY	GIY	Arg	1111	910	1111	vai
256	د ۱ ۵	Glv	Glu		Dhe	Hic	Met	Val		Δsn	val	Ser	Met		Val	His
260	mu	Oly	915	**** 9	1110			920	0			501	925			
	His	Ile		Arq	Glu	Pro	Thr		Cys	Lys	Val	Leu		Ser	Thr	Leu
264		930	4	,			935		•	. •		940				
267	Ile	Thr	Cys	Pro	Ser	Pro	Gly	Ala	Leu	Ser	Asn	Ala	Ser	Ala	Pro	Val
	945					950					955					960
	Asp	Phe	Phe	Ile		Gly	Arg	Ala	Tyr		Asp	Glu	Ala	Ala		Glu
272		_	_^	_	965			~~		970	_		73	_	975	3
275	Leu	Leu	Asp	Pro	Ala	Glu	Ala	GIn	Arg	GLY	ser	Arg	rne	arg	ьeu	Asp

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276				980				98	35				990)	
279	Tyr	Leu l	Pro A	Asn I	Pro (3ln 1	Phe Se	er T	thr A	Ala 1	Lys 2	arg G	lu I	ys :	Trp Ile
280	•		995					000					005		
283	Lys	His	His	Pro	Gly	Glu	Pro	Leu	Thr	Leu	Val	Ile	His	Lys	Glu
284	_	1010			•		1015			•		1020		_	
287	Gln	Asp	Ser	Leu	Gly	Leu	Glu	Ser	His	Glu	Tyr	His	Ile	Lys	Ile
288		1025			-		1030				-	1035		_	
	Gly	Gln	Val	Ser	Cys	Asp	Ile	Gln	Ile	Ile	Ser	Asp	Arg	Val	Ile
292	•	1040				-	1045					1050	_		
295	His	Cys	Ser	Val	Asn	Glu	Ser	Leu	Gly	Thr	Ala	Glu	Gly	Gln	Leu
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304		1085		_	-		1090					1095			
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323	Lys	Glu	Leu	Asn	Arg	Ser	${ t Gln}$	_	Ile	Pro	Phe	Leu	Glu	Tyr	Lys
324		1160					1165					1170			
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	Glu	Glu	Arg	Tyr	Val	Leu	Pro		Lys	Thr	Leu		Ser	Gln	Gly
332	_	1190			_		1195					1200		_	_
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336		1205			_	_	1210					1215		_	_
	Ile		Glu	His	Cys	Arg	Pro		Met	GIu	GIu		He	Ser	Leu
340	_,	1220	_	_	_	_	1225		•••	5 1		1230	**- 7	D1	**- 7
			Ser	Leu	Leu	Asn	Asn		HIS	Pne	ьeu		vaı	Pne	vai
344		1235	.	~1	~1	~1	1240		Dh a	77.	77-7	1245	7	7	C
			ьeu	GIU	GIN	Gin	Lys		Pne	Ата	val	1260	Asp	Arg	Cys
348		1250	77-	.	T	T	1255		77.	T	TT		T	T 011	C1
351	ser	ьеи 1265	Ala	ser	Leu	ьеи	Thr 1270		AIA	Leu	птъ	1275	гур	Leu	GIU
	m		mb ~	Cor	Tlo	Mot	Lys		Lou	Lou	17-1		Len	Tla	Acn
356		1280		ser	116	Mec	1285		neu	шeц	vai	1290	neu	116	rap
				Nla	Laze	λen	Pro		T.011	Mot	T.011		Δτα	Thr	Glu
360	Ala	1295	AIA	AIa	цуз	ASII	1300	цуз	ыçu	Mec	Бец	1305	nr 9	1111	014
	Sar		₩.	Gl 11	Lve	Mot	Leu	Thr	Δen	Trn	Mot		Tle	Cys	Met
364	Der	1310	VAI	GIU	щy	1156	1315					1320	-10	- 10	
	Tur		Cvc	T.e.ii	Δτα	Glu	Thr		Glv	Glu	Pro		Phe	Len	Leu
368	- y -	1325	Cys	Leu	m 9	UI U	1330		O + 3	OIU		1335			
	Len		Δ1=	Tle	Laze	Gln	Gln		Asn	Lvs	Glv		Ile	Asn	Ala
372	u	1340			_, 5	<u></u>	1345			_, _	1	1350			
J , L															

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375 376	Ile	Thr 1355	Gly	Lys	Ala	Arg	Tyr 1360	Thr	Leu	Asn	Glu	Glu 1365	Trp	Leu	Leu
379	Arg	Glu	Asn	Ile	Glu	Ala	Lys	Pro	Arg	Asn	Leu	Asn	Val	Ser	Phe
380		1370	_			_	1375	_	_		_	1380		•	 1
383 384	Gln	Gly 1385	Cys	Gly	Met	Asp	Ser 1390	Leu	Ser	Val	Arg	A1a 1395	Met	Asp	Thr
387 388	Asp	Thr 1400	Leu	Thr	Gln	Val	Lys 1405	Glu	Lys	Ile	Leu	Glu 1410	Ala	Phe	Cys
	Two		W=1	Dro	Тиг	Sar	Gln	Trn	Dro	Ara	Δla		Asn	Val	Asn
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412		1490					1495					1500			
415	Leu	Val	Glu	Pro	Lys	Lys	Ser	His	Arg	Gln	Ser	His	Arg	Lys	Lys
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419	Val	Leu	Pro	Glu	Ile	Tyr	Leu	Thr	Arg	Leu	Leu	Ser	Thr	Lys	Gly
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423	Thr	Leu	Gln	Lys	Phe	Leu	Asp	Asp	Leu	Phe	Lys	Ala	Ile	Leu	Ser
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427	Ile	Arg	Glu	Asp	Lys	Pro	Pro	Leu	Ala	Val	Lys	Tyr	Phe	Phe	Asp
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440		1595					1600					1605			
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455	Lys	Thr	Val	Gln	Arg	Tyr	Tyr	Lys	Gln	Ile	Gln	Asp	Met	Thr	Pro
456		1655	•				1660					1665			
459	Leu	Ser	Glu	Gln	Glu	Met	Asn	Ala	His	Leu	Ala	Glu	Glu	Ser	Arg
460		1670					1675					1680			
463	Lys	Tyr	Gln	Asn	Glu	Phe	Asn	Thr	Asn	Val	Ala	Met	Ala	Glu	Ile
464	-	1685					1690	•				1695			
	Tyr	Lys	Tyr	Ala	Lys	Arg	Tyr	Arg	Pro	Gln	Ile	Met	Ala	Ala	Leu
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VERIFICATION SUMMARY

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